

# 5V3A

## Full-Wave Vacuum Rectifier

### GENERAL DATA

#### Electrical:

Filament, Coated:

Voltage (AC or DC). . . . .  $5 \pm 10\%$  volts  
Current at 5 volts. . . . . 3 amp

#### Mechanical:

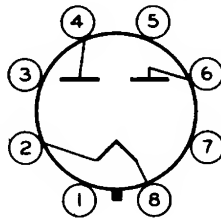
Operating Position. . . . . Vertical, base down or up, or  
Horizontal with pins 2 and 4 in vertical plane  
Maximum Overall Length. . . . . 4-5/8"  
Maximum Seated Length . . . . . 4-1/16"  
Diameter. . . . . 1.438" to 1.562"  
Bulb. . . . . T12  
Base. . . . . Short Medium-Shell Octal 8-Pin with External Barriers  
Style B (JEDEC Group 1, No. B8-118) or  
Style A (JEDEC Group 1, No. B8-110), or  
Short Medium-Shell Octal 5-Pin with External Barriers,  
Style B, Arrangement 1 (JEDEC Group 1, No. B5-121)  
Basing Designation for BOTTOM VIEW. . . . . 5T

Pin 1—No Connection

Pin 2—Filament

Pin 3<sup>a</sup>—Same as Pin 1

Pin 4—Plate No. 2



Pin 5—Same as Pin 1

Pin 6—Plate No. 1

Pin 7—Same as Pin 1

Pin 8—Filament

### FULL-WAVE RECTIFIER

#### Maximum Ratings, Design-Maximum Values:

*For power-supply frequencies of 25 to 1000 cps*

PEAK INVERSE PLATE VOLTAGE. . . . . 1550 max. volts  
AC PLATE SUPPLY VOLTAGE PER PLATE  
(RMS, without load) . . . . . 550 max. volts  
STEADY-STATE PEAK PLATE CURRENT PER PLATE . . . 1.4 max. amp  
TRANSIENT PEAK PLATE CURRENT PER PLATE. . . 6.6 max. amp  
DC OUTPUT CURRENT with capacitor-input  
filter for ac plate supply volts (RMS,  
per plate, without load) = 470. . . . . 415 max. ma

#### Typical Operation:

*With capacitor-  
input filter      With choke-  
input filter*

AC Plate-to-Plate Supply Voltage (RMS, without load) .	600	850	1000	volts
Filter-Input Capacitor <sup>b</sup> . . . . .	40	40	—	$\mu$ f
Filter-Input Choke. . .	—	—	10	henrys



RADIO CORPORATION OF AMERICA  
Electron Tube Division      Harrison, N. J.

DATA  
7-61

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## Total Effective Plate

Supply Impedance					
Per Plate . . . . .	20	50	-	ohms	—
DC Output Voltage at					
input to filter . . .	300	440	390	volts	
DC Output Current . . .	380	350	350	ma	

## Characteristics:

Tube-Voltage Drop for plate ma. = 350

(Per plate) . . . . . 42 volts —

<sup>a</sup> On the 5-pin base, pin 3 as well as pins 5 and 7 is omitted.

<sup>b</sup> When capacitance values higher than 40  $\mu$ f are used, the effective plate supply impedance should be increased so that the maximum peak-plate-current rating is not exceeded.

